



TENDER NO: 60 / 2019

**CONSTRUCTION OF ABLUTION BLOCK
(PPLTC WORKSHOP) AT SECTION 12 LOT 04 -
HOHOLA. NATIONAL CAPITAL DISTRICT**

*Property Development Team
PS Group – Finance & Shared Services BU
P. O. Box 1105, BOROKO 111
National Capital District*



TENDER NO: 60 / 2019

CONSTRUCTION OF ABLUTION BLOCK (PPLTC WORKSHOP)
AT SECTION 12 ALLOTMENT 04 – HOHOLA,
NATIONAL CAPITAL DISTRICT

Prepared By: 
Checked By: 
Date: 09/10/19.

PNG POWER LIMITED

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FRONTISPIECE

BRIEF DESCRIPTION OF TENDER

This Tender is purposely for the Construction of New Ablution Block for PPL Training College Workshop Areas and other associated works required under this contract.

PNG POWER LIMITED

SECTION 1

CONSTRUCTION OF ABLUTION BLOCK (PPLTC WORKSHOP) AT SECTION 12 ALLOTMENT 04 – HOHOLA. NATIONAL CAPITAL DISTRICT.

(A) INVITATION TO TENDER

Tender/bids close with:

PNG Power Limited,
P. O. Box 1105,
BOROKO,
Papua New Guinea

At 4:00 pm _____ 2019.

The Tender Submission shall consist of the following, all duly completed;

- Form of Tender
- Schedule of Quantities
- GST and Tax Registration Numbers
- Additional information/price offered by the Supplier to aid the evaluation of the Tender.

Enquiries during the Tender period shall be addressed to:

PNG Power Limited,
P. O. Box 1105,
BOROKO,
Papua New Guinea.

ATTENTION: Mr. Ivan Anengo
Senior Property Development Officer
Corporate Services Business Unit

Fax: 323 5239
Telephone: 324 3514
Email: ianengo@pngpower.com.pg

(B) FORM OF TENDER

CONSTRUCTION OF ABLUTION BLOCK (PPLTC WORKSHOP) AT SECTION 12 ALLOTMENT 04 – HOHOLA. NATIONAL CAPITAL DISTRICT.

Companies quoting are required to complete the blank spaces in this Tender Form and complete the Schedules included.

To: PNG Power Limited
P. O. Box 1105,
BOROKO. NCD

Gentlemen,

1. Having examined the Drawings, Specification and Schedules for the execution of the above named Works, we, the undersigned, offer to execute and complete the works accordingly for the sum of (words & figures)
.....
.....
.....(K.....)
2. We undertake, if our quotation is accepted, to complete and deliver the whole of the works within ten (10) weeks from the date of receiving your Official Order.
3. We agree to abide by this Tender for the period of ninety (90) days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before expiration of that period.
4. This Tender, together with the receipt of your Official Order thereof, shall constitute a binding Contract between us.
5. We understand that you are not bound to accept the lowest or any Tender you may receive.

Signed and sealed for and on behalf of:)
.....)
by)
the)
of the said Company herein)
authorised in the presence of)
Address of Company Bidding:.....

(C) TENDER DATA

CONSTRUCTION OF ABLUTION BLOCK (PPLTC WORKSHOP) AT SECTION 12 ALLOTMENT 04 – HOHOLA. NATIONAL CAPITAL DISTRICT.

(i) TENDERER'S ORGANISATION

1. Name: Nationality:
2. Business Address: Fax:
- P. O. Box No: Phone:
-

(ii) CONTRACT SUPERVISION

Tenderers shall list their proposed supervisory staff for this Contract. (number and designation only).

(iii) STATEMENT OF EXPERIENCE

The Tenderer shall state hereunder facts in detail describing previous experience and achievements in performing similar or comparable works together with the names of authorities for whom, and the dates when, such works was carried out.

CONSTRUCTION SCHEDULE

CONSTRUCTION OF ABLUTION BLOCK (PPLTC WORKSHOP) AT SECTION 12 ALLOTMENT 04 – HOHOLA. NATIONAL CAPITAL DISTRICT.

The Bidder should indicate his proposed program for completing various stages of the work by filling in the schedule below.

ACTIVITY	TIME IN WEEKS									
	1	2	3	4	5	6	7	8	9	10
Mobilisation & Set-Up										
Excavation & Levelling										
Concrete Works										
Concrete Block Works										
Metal/Steel Works										
Carpentry (incl. roof framing)										
Roofing, Plumbing & Drainage Works										
Tiling Works										
Electrical Works										
Painting Works										
Clean Up										

(D) PRICE SCHEDULES

**CONSTRUCTION OF ABLUTION BLOCK (PPLTC WORKSHOP) AT SECTION 12
ALLOTMENT 04 – HOHOLA. NATIONAL CAPITAL DISTRICT.**

(i) LUMP SUM BREAKDOWN

1.0	Mobilisation & Site Set Up	K.....
2.0	Excavation & Levelling	K.....
3.0	Concrete Works	K.....
4.0	Concrete Blockworks	K.....
5.0	Metal/Steel Works	K.....
6.0	Carpentry Works	K.....
7.0	Joinery and Hardware	K.....
8.0	Roofing and Drainage Works	K.....
9.0	Plumbing Works	K.....
10.0	Tiling Works	K.....
11.0	Electrical Works	K.....
12.0	Painting Works	K.....
13.0	Cleaning	K.....
	Sub-total	K.....
	GST	K.....
	TOTAL LUMP SUM (Carried to Form Tender)	K.....

Name of Contractor:

Signature:

Date:

Witness:

SECTION 2 TECHNICAL SPECIFICATION

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(A) JOB SPECIFICATION

1. SCHEDULE OF PRELIMINARIES

1.1 GENERAL

The Contractor shall carry out the works as detailed and or inferred in the Technical Specification comprising of Trade Schedules and Drawings which takes precedence over the Standard Specification, Part (B).

1.2 STANDARDS

All works shall be carried out to the accepted standard trade practices, Local Authority Regulations and the relevant PNG and Australian Standards.

1.3 NATURE OF CONTRACT

The contract will be Fixed Price Lump Sum Contract. Approved variations shall be paid for at the applicable rates listed in the Schedule of Rates for Variations.

1.4 LOCATION OF SITE

The work site is located at Section 12 Allotment 04 within the vicinity of PNG Power Training College Workshop Area – Hohola, National Capital District.

1.5 DESCRIPTION OF WORK

All works covered in this contract is as stipulated within the scope of works. It basically requires blockworks, carpentry, metal works, electrical and painting.

1.6 SITE INSPECTION

The Contractor shall inspect the site prior to lodging his Tender and satisfy himself with the nature of the site, PNG Power Ltd will not be liable if conditions proved otherwise climatic conditions and services relevant to the contract.

1.7 POSSESSION OF SITE

Possession of Site shall be on the date stated in the Letter of Acceptance to the successful tenderer.

The Contractor shall be given such possession of the site as is considered necessary to carry out these works, but such possession shall not be deemed to mean exclusive possession.

1.8 SITE OPERATIONS

1.8.1 Safety

All matters and conditions regarding safety, health and welfare of persons working on site shall be the responsibility of the Contractor.

1.8.2 Site Facilities

The Contractor shall arrange for and meet all the costs associated with the provisions of his electricity, telephone, water ablution facilities, temporary buildings for his workmen including site security.

1.9 CONSTRUCTION SCHEDULE

The Contractor shall provide a detailed construction schedule expanding on the Tender Construction Schedule within two (2) weeks of acceptance of contract.

1.10 USE OF SECOND HAND MATERIALS

No second hand materials shall be used unless indicated in the specification or shown on the drawing or until they have been inspected and approved by the Superintendent. Any materials reused shall be finished to "as new" condition.

1.11 SETTING OUT

The works shall be located where indicated on the drawings, however, the accurate setting out and adherence to details of levels and squareness of the building will be the sole responsibility of the Contractor.

1.12 TIME FOR COMPLETION

The works shall be Practically Completed within Ten (10) weeks from the date of Possession of Site given in PNG Power's Letter of Acceptance.

1.15 CLEANING UP

Upon completion of the works, the contractor shall leave the work areas clean and clear of rubbish, excavated material and access material which is of no use to PNG Power. All rubbish shall be dumped at the local authority's official garbage dump and not at or around the work site.

2.0 DESCRIPTION OF WORKS

2.1 MOBILISATION & SITE SET-UP

- 2.1.1 The Contractor shall organise and mobilise on site upon PPL instruction or upon receiving of PPL Official Purchase Order.
- 2.1.2 The contractor shall arrange for temporary services on site including site access, telephone, power and sewerage for use by its workers.
- 2.1.3 The Contractor shall arrange for storage spaces on site to store materials, tools and other plant and equipments.
- 2.1.4 The Contractor shall also arrange for Security on site to safe-guard building materials, plants and equipments where necessary.

2.2 EXCAVATION AND LEVELLING

- 2.2.1 The existing ground level around the perimeter of the building shall be excavated and levelled properly. Backfill any area that is low with proper soil or road base materials.
- 2.2.2 Locate underground services and foundations before any excavation work commences. Make good at no extra cost damages to existing services.
- 2.2.3 The contractor shall excavate for footings (edge beam) and slab as shown on the drawing.
- 2.2.4 The contractor shall also excavate trench to place all waste pipes as shown on drawing.

2.3 CONCRETE WORKS

- 2.3.1 All concrete shall have a minimum strength of 20 MPa.
- 2.3.2 All concrete mixing shall be by mechanically driven revolving drum. Hand mixing is not permitted unless approved by the Superintendent. Minimum mixing proportions shall be 3:2:1 with a maximum slump of 80mm.
- 2.3.3 All footings, slabs, reinforcing, formwork etc. shall be inspected by the Superintendent before commencement of mixing and placing of concrete.
- 2.3.4 For all slab construction, supply and lay fortecon membrane to underside of slab, lapped 150mm and taped at joints.
- 2.3.5 Provide 300x300x150mm deep precast concrete splash pads to each downpipes.
- 2.3.6 Construct 100mm thick concrete slab as shown and place F72 mesh 30mm minimum cover.

2.4 BLOCK AND MASONARY WORKS

All works under this category shall be undertaken by the experienced Bricklayer and comply with all relevant codes of this specifications.

2.4.1 Blocks

All blocks shall be Class A blocks Monier or equal approved – with a minimum strength of 12MPa.

2.4.2 Standard 400x200 Blocks

Lay stretcher bond, reinforced and core filled as detailed. Refer Drawing No: M11894-08.

2.4.3 Beams

At every second course where horizontal reinforcement is required all round, lay knock out beam blocks and core fill. Also lay and reinforce above all openings.

2.4.4 Reinforcements

Provide and place all bars (S12) and ties (R10) in blockwork as detailed. Horizontal at every second coarse all round.

2.4.5 Conduits

For electrical wiring the contractor will provide 25 dia. Conduits for embedding as instructed on site. Draw wires shall be left in the conduit runs.

2.4.6 Laying

All blocks shall be laid in stretcher bond to meet acceptable standards.

2.4.7 Corefill

All cores whether reinforced or not shall be core-filled.

2.4.8 Jointing

Joints in blockwork shall be "iron" jointed all through-out.

2.4.9 Chasing

Chasing of blockwork is not permitted. Pipework, conduits etc. shall be built in and concealed in blockwalls.

2.4.10 Cleaning

Clean down all blockwork as work progresses to ensure total removal of mortar droppings and smears.

2.5 **METAL AND STEEL WORKS**

All works under this section shall be done with as per relevant building codes and practices.

2.5.1 Supply and installed new roofing sheets as listed under Roofing Section with proper fastenings.

2.5.2 Supply and install all required louvre frames. Louvre blade shall be 6mm glass blades or metal accepted as approved.

- 2.5.3 All security doors shall be fabricated as per the detail drawings shown.
- 2.5.4 Supply and fabricate all security grill mesh for the windows as shown on the drawings.
- 2.5.5 All steel products shall be obtained from an approved manufacturer.
- 2.5.6 All weldings and fabrication shall be done by a Licensed Welder.

2.6 CARPENTRY WORKS

2.6.1 Barge and Fascia Board

Supply and fix new fascia and barge boards. The size shall be 175x30mm and the board shall be securely fixed at the ends of timber rafters.

The contractor shall ensure to apply wood primer to exposed timber board surfaces prior to fixing.

2.6.2 Door Jambs and Window Frames

The contractor shall supply and install door and window frames as shown on the drawings.

2.6.3 Roof Truss Frames

Supply and install as shown on drawing M11892-08.

2.7 JOINERY AND HARDWARE

2.7.1 Doors

- a. External - supply and install new solid core doors as shown on the drawing.
- b. Internal – supply and install doors with laminex finish.

2.7.2 Door Locks

Provide and install entrance set locks to all doors.

2.7.3 Change Bench

Construct change bench as shown on the drawing M11892-09.

2.8 ROOFING AND DRAINAGE WORKS

All roofing works to be carried out according to Manufacturers relevant codes and practices.

2.8.1 Roofing Sheets

Roofing shall be corrugated zincaluminum bond custom orb neatly fixed on to the purlins/battens.

2.8.2 Overhangs

Overhang length shall be 900mm minimum as shown on drawings.

2.8.3 Roof Fasteners

60mm long tekscrews shall be used as roof fasteners and the contractor shall use three(3) number of tekscrews on roof sheets and securely fastened as per roof battens.

2.8.4 Sisalation

Supply and install 1.2m wide double sided insulation paper and allow 150mm lap over on each joints.

2.8.5 Gutter

- a. Supply and install new sheerline gutter and shall be fixed the full length of both sides of the existing building.
- b. The contractor shall allow a fall starting from the centre of the length of the building and runs towards the two ends of the building.

2.8.6 Gutter Brackets

An appropriate trim line gutter brackets shall be used prior to fixing of the gutter. The gutter brackets shall be fixed at 1.0 meter spacing with an appropriate fixer or fasteners.

2.8.7 Down Pipes

Down pipes shall be 100 diameter PVC and shall be filtered tightly where the drops are. All joints shall be neatly fitted to avoid appearing of gaps.

2.8.8 Flashings

An appropriate metal flashing shall be provided at the edges of the roofing and securely fasten with appropriate fasteners on to the Barge Board. Ensure to seal off screw heads properly with approved sealant.

2.9 **PLUMBING WORKS**

2.9.1 General

All plumbing shall be carried out by competent Tradesmen who hold current Sanitary Plumbers licences issued by the authorised Public Health Authority.

2.9.2 Cold Water Supply

Provide and maintain cold water supply to the following fittings:-

- hand basins
- shower roses
- urinals and
- water closets (wc)

2.9.3 Traps and Wastes

- a. Supply and provide 50mm dia. uPVC to hand basin, floor waste outlet and urinals.
- b. Supply and provide 100mm dia. uPVC to water closets.

2.10 **TILING WORKS**

All tiling works shall be done in accordance with relevant codes and practices. All materials and workmanship shall be of best quality.

2.10.1 Floor Tiles – 300x300mm

Supply and install ceramic tiles as specified on drawings and specification. Contractor to supply the sample (colour and type) to be approved by the PPL Inspector.

2.10.2 Wall Tiles – 100x100mm

Supply and install ceramic tiles as specified on drawings and specification. Contractor to supply the sample (colour and type) to be approved by the PPL Inspector.

2.10.3 Bull-nose Tiles – 150x100mm

Supply and install bull-nose tiles at ends of all tile works.

All ceramic tiles shall be firmly bedded on beads of adhesive and shall be grouted properly.

2.11 **ELECTRICAL**

All electrical works to be undertaken by a Licensed Electrician according to the relevant codes and practices. All materials shall be of the best quality and workmanship shall be accordingly to the best trade practice of the workmanship in accordance with the PNG Power requirement.

2.11.1 Standards and Workmanship

Comply with all the relevant PNG Power Limited rules, codes and requirements. All works in this section shall be read in conjunction with drawing M11892-03

2.11.2 Distribution Board

The contractor shall supply and install new distribution board for the new building as shown on drawing.

2.11.3 Wiring

All wiring shall be concealed inside the ceiling and in conduits embedded in the block walls.

2.11.4 Light Switch

Supply and install light switches as shown on the drawing. Switches shall be mounted 1.2m above floor level.

2.11.5 Lights and Fittings

Supply and install light tubes and fittings as shown on the drawing.

2.11.6 Daylight Switch

Provide and install a daylight switch as shown on drawing.

2.12 **PAINTING SPECIFICATION**

2.12.1 Quality of Materials

The contractor shall supply all painting materials and store them neatly in an appropriate area free from dust, moisture or anything that may have an immediate effect on painting materials.

All materials used for this painting work shall be of higher grade. No second grade materials shall be used, if the contractor shall or may want to use second graded materials, the contractor must seek Inspector's approval.

2.12.2 Brand

The contractor shall supply materials such as, undercoat, turps, final coat etc, from the same Manufacturer. Mixtures of painting materials from different brand of manufactures shall not be allowed.

2.12.3 Wash down

All painting surfaces shall be thoroughly washed down with approved detergent or sugar soap prior to commencement of any painting work. The contractor shall seek approval from PNG Power supervisor after thorough wash down all surfaces before commencing of painting work.

2.12.4 Drop Sheet

A drop sheet shall be used by the Contractor during the cause of the painting work to protect the floor of the building.

2.12.5 Under Coats

A water base Acrylic under coat or similar approved type under coat that can quickly settled and dried shall be used. The Contractor shall apply one (1) coat on old surfaces. 2 coats of under coats on new surfaces.

2.12.6 Putty

The contractor shall use sparkfilla and polyfilla or similar approved putty to fill holes, gaps or any uneven surfaces. Puttied areas shall be left for a day before any sanding is carried out. This putting work shall be carried out after painting of first coat of under coat.

2.12.7 Final Coat

After completion of the sanding work to all painting surfaces, the contractor shall carry out the painting of the final two (2) coats. Colours shall be preferred by the PNG Power Supervisor.

2.12.8 Turpentine

The Contractor shall only use turpentine to wash paintbrushes or to soften paint so that paints are flexible and easy to use. Kerosene shall not be used when carrying out the painting work.

2.12.9 Scaffolding

The Contractor's responsibility to provide necessary scaffolds and securely fixed to avoid accidents. PNG Power shall not be responsible for any accident created due to negligence.

2.12.10 Painting and Varnishing

- a. The contractor shall use Taubmans paints only when carrying painting works.
- b. Do not apply under coat without the approval of the PNG Power Inspector.
- c. All existing paint surface shall be cleaned and washed down properly with sugar soap or detergents prior to applying of any under coat.
- d. Apply masonry filler under coat for all masonry surfaces prior to painting of final coats.
- e. All rusted metal surface shall be cleaned and scrape off properly before applying of metal primer.
- f. Colours scheme shall be provided by PNG Power Inspector.
- g. New surfaces shall have 2 coats of under before applying of 2 final coats.

2.13 CLEANING UP

Upon completion of the works, the contractor shall leave the work areas clean and clear of rubbish and excess material which is of no use to PNG Power Ltd.

All rubbish shall be dumped at the Local Authority's official dump site and not at or around the work site.

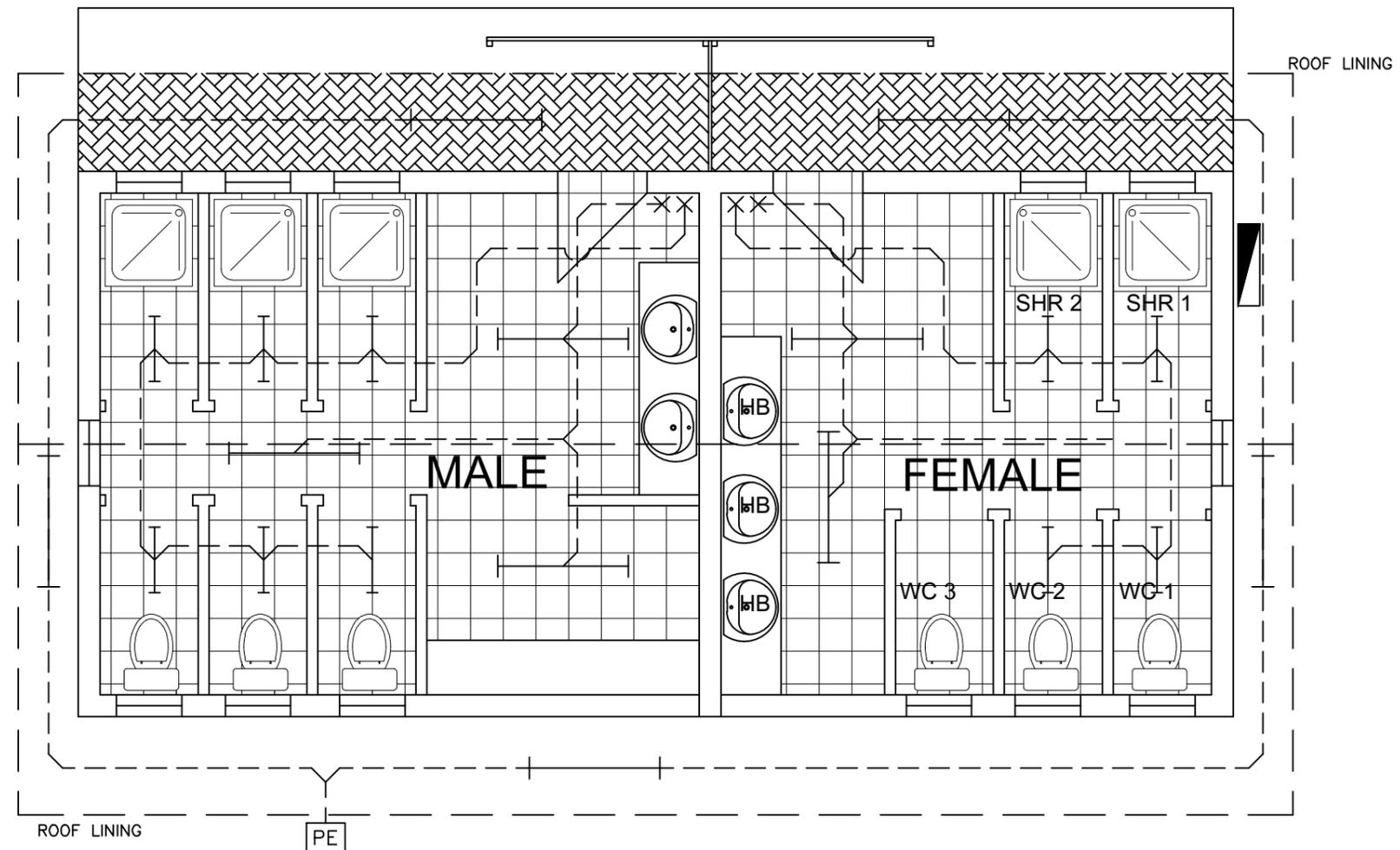
*******END OF SCOPE*******

(J) LIST OF DRAWINGS

The Contractor shall undertake the works for Tender in accordance with the Drawings listed below and as appended. The drawings form part of the Contract Documents and all notes on the drawings are considered to be part of the drawings and the Contract. If the drawings conflict with any other part of the Contract Documents, the drawings will take precedence.

Drawing Ref. No.	Drawing Title	Date of Issue
M11892	Construction of Ablution Block (PPLTC Workshop) at Section 12 Allotment 04 – Hohola. NCD	Nov 2016
Sheet 00	Cover Sheet, Drawing Index	
Sheet 01 of 10	Site Locality / Site Plans	
Sheet 02 of 10	Floor Plan	
Sheet 03 of 10	Electrical Layout	
Sheet 04 of 10	Plumbing/Drainage Layout	
Sheet 05 of 10	Elevation 01 & 02	
Sheet 06 of 10	Elevation 03 & 04	
Sheet 07 of 10	Cross Section	
Sheet 08 of 10	Construction Details	
Sheet 09 of 10	Window/Door Schedules & Details	
Sheet 10 of 10	Blockwork Details	

ELECTRICAL LEGEND	
	36W FLUORESCENT LIGHT FITTING
	18W FLUORESCENT LIGHT FITTING
	10AMP LIGHT SWITCH
	SWITCHPLUG 10 AMP FLUSH.
	PHOTOELECTRICAL SWITCH
	ELECTRICAL WIRINGS
	ELECTRIC DISTRIBUTION BOARD




ELECTRICAL LAYOUT
 scale 1:50

CAD Filename	Rev.	Revision	By	Chk'd	Date	Drawn	Designed	Checked	Endorsed	Approved	Location	Title	Number	Revision	Sheet
C:\HQ\PL\TRAININGCOLLEGE.DWG						ia; evp	ia; evp				SECTION 12 LOT 05 - HOHOLA. NCD	PROPOSED WORKSHOP ABLUTION ELECTRICAL LAYOUT	M 11892	0 3	02 OF 08
Date Plotted:	Scale:														
19th JULY, 2016	AS SHOWN														

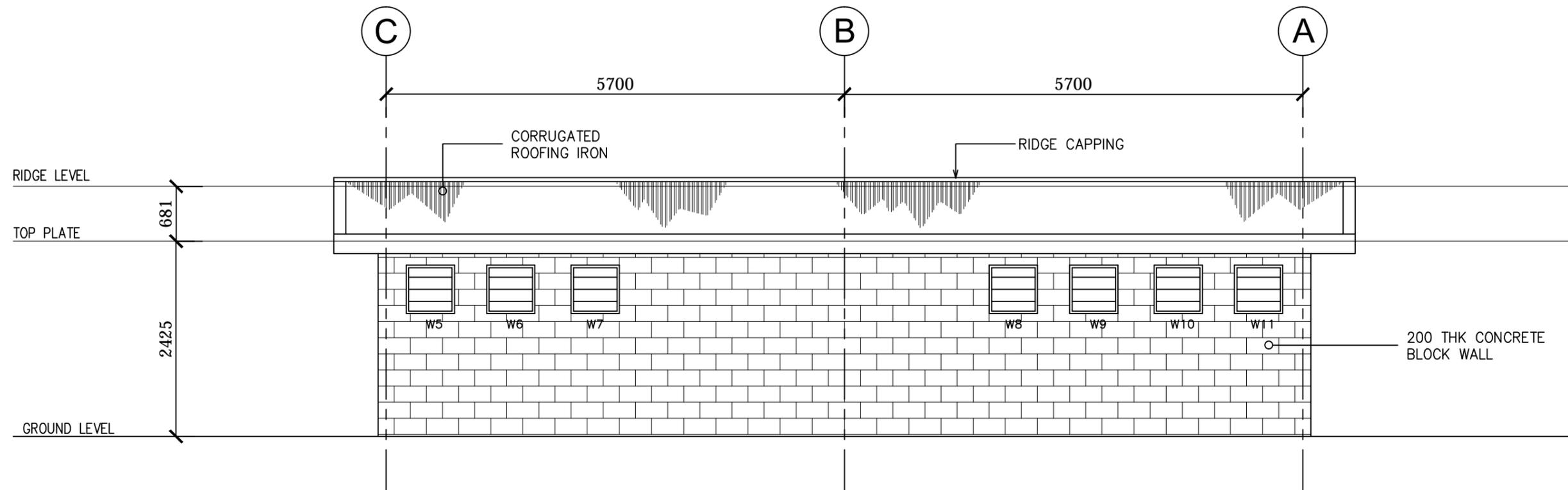


PNG POWER Ltd

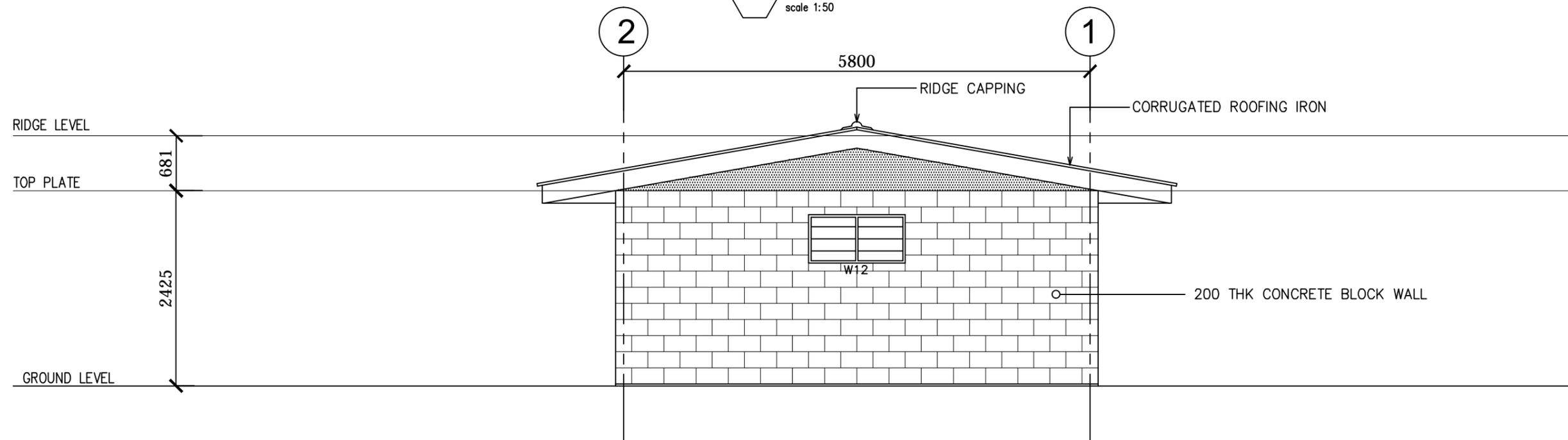
P. O. Box 1105, BOROKO 111. NCD. Papua New Guinea.

Telephone: (675) 324 3200
Facsimile: (675) 325 0185

E-mail: ianengo@pngpower.com.pg
E-mail: eparu@pngpower.com.pg



ELEVATION 03
scale 1:50



ELEVATION 04
scale 1:50

CAD Filename	Rev.	Revision	By	Chk'd	Date
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Date Plotted:	Scale:				
19th JULY, 2016	AS SHOWN				



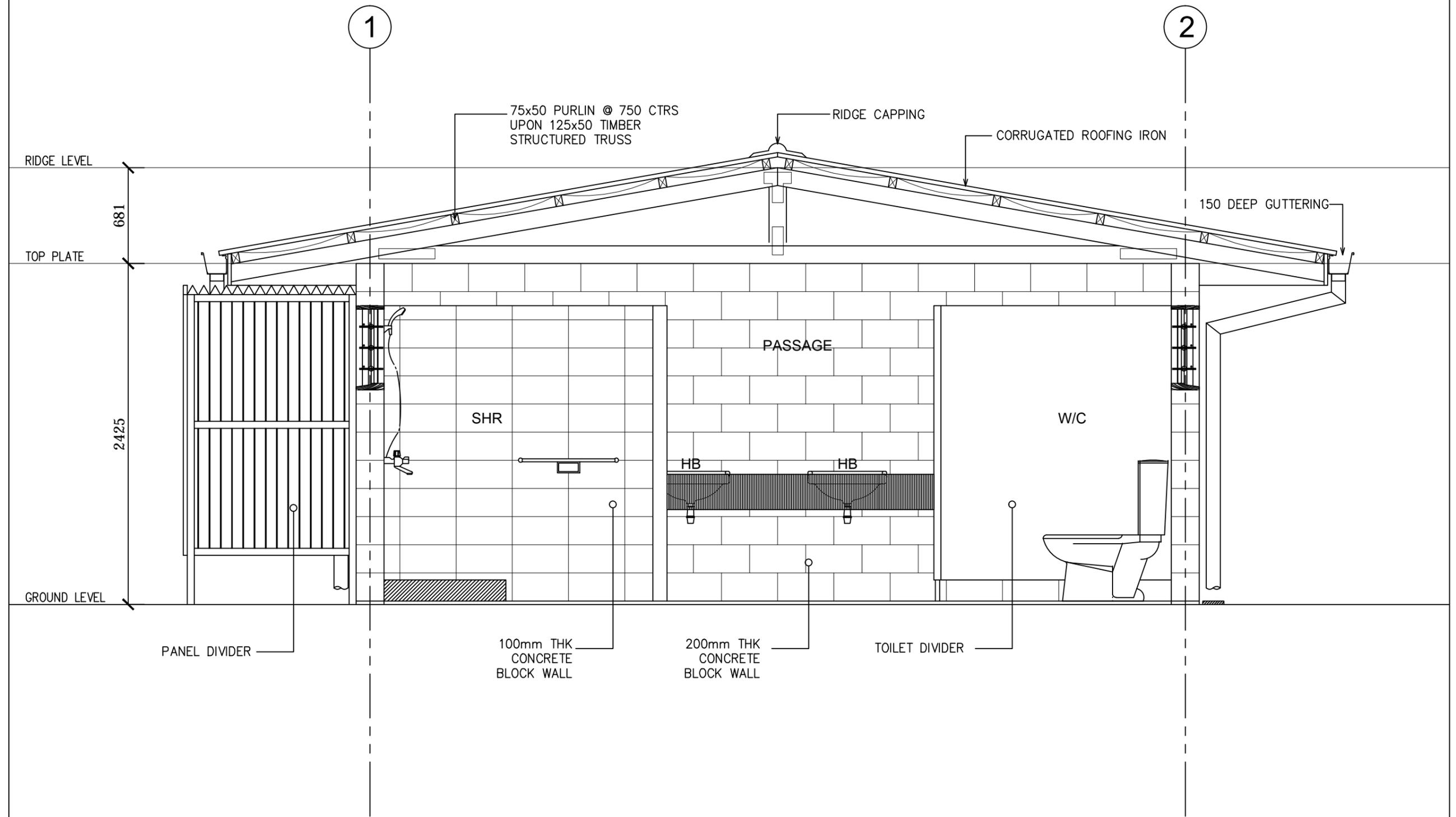
PNG POWER Ltd

P. O. Box 1105, BOROKO 111. NCD. Papua New Guinea.

Telephone: (675) 324 3200
Facsimile: (675) 325 0185

E-mail: ianengo@pngpower.com.pg
E-mail: eparu@pngpower.com.pg

Drawn	ia; evp	JULY'16	Location	SECTION 12 LOT 05 - HOHOLA. NCD
Designed	ia; evp		Title	PROPOSED WORKSHOP ABLUTION
Checked			A3	ELEVATION 03 & 04
Endorsed			Number	M 11892
Approved			Revision	0 3
				Sheet 05 OF 08



CROSS SECTION A-A
scale 1:25

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Date Plotted:	Scale:				
19th JULY, 2016	AS SHOWN				


PNG POWER Ltd
 P. O. Box 1105, BOROKO 111. NCD. Papua New Guinea.
 Telephone: (675) 324 3200 E-mail: ianengo@pngpower.com.pg
 Facsimile: (675) 325 0185 E-mail: eparu@pngpower.com.pg

Drawn	ia; evp	JULY'16	Location	SECTION 12 LOT 05 - HOHOLA. NCD
Designed	ia; evp		Title	PROPOSED WORKSHOP ABLUTION
Checked			A3	CROSS SECTION A-A
Endorsed			Number	M 11892
Approved			Revision	0 3
				Sheet 06 OF 08

